

19. NOTES ON *PHELSUMA ANDAMANENSE*, THE ANDAMAN DAY GECKO OR GREEN GECKO

(With a photograph)

In April 1975, when Z. W. made the first Madras Snake Park Trust herpetological expedition to the Andaman Islands, she noted the relative abundance of the gecko *Phelsuma andamanense* particularly in gardens containing smooth palms (coconut, arecanut and others) and plantain trees. Secondary preferences were peepal, papaya and occasionally exotic avenue trees (in Mayabandar). R.W. on a visit in June 1977 saw a few *Phelsuma* on streamside jungle trees and one on a vine at Burmah Nullah, South Andaman. This was the only jungle sighting of *Phelsuma* in three months in the field. R.W. found *Phelsuma* in Diglipur, North Andaman, again only around human habitation (on a wooden porch at the Diglipur Ranger's residence). It was found to be common in the Mayabandar area and the populations of a coconut grove near Webe village on the Mayabandar-Rangat road were easily observable. Several days were spent observing these active reptiles.

29/vi/77: Temperature at 6 a.m. 25°C; at 5 p.m. 28°C; sunny morning, rain most of the afternoon. 10 *Phelsuma* were visible in the early sun, most on the coconut palm branches at the wide base, several others seen on the flowers of the palm. Those observed included adult males, females, what appeared to be half grown juveniles and small juveniles, recently hatched. One tree was picked out and the *Phelsuma* population observed with 7 × 50 binoculars whenever there was free time. The following are a few observations made from field notes:

5/vii/77: Adult female and half grown juvenile on blooming coconut flower. Avoid

bees of several kinds and snap up certain flies. One tailless small juvenile emerged onto another flower. They walk in typical gecko fashion with occasional sudden jumps. Very agile. Adult female moved to underside of frond and was approached by tail waving adult male. Adult male covered half of adult female's body before adult female suddenly darted forward, tail waving. After a short time she turned, returned to adult male and touched him on the side. Adult male turned and crawled up the stem and adult female resumed basking. This tree appears to have 6 resident *Phelsuma* as two more half grown juveniles (appearing to be almost mature females about 11 cm) were seen later.

7/vii/77: Morning watched *Phelsuma* on coconut palm 6 m up, mainly on flowers; one adult male, 2 adult females and 3 half grown juveniles all feeding at flowers. Not only awaiting insects but licking stems and flowers (possibly sweet sap or condensed moisture). Watched half grown juveniles stalk and capture small blue butterfly, black ant, and 2 species of small bees or flies, all attracted to the coconut flower. Adult male actively chases small juveniles and half grown juveniles away. He jumps at adult females but they only dodge and generally return. Considerable tail wagging indulged in by all *Phelsuma* particularly during close approaches of another. Adult female after dodging adult male, turns and raises head, exposing yellow throat and flexes front legs and forebody. Adult male, when threatening juveniles and rival males, raises up (straightens) front legs and turns body toward the other to display red spots at tail base and

top of head.

In dominant males (upto 14 cm) head, tail-base and tail are bluish grey. Females are generally brilliant green (as is the adult male's dorsal body colour), juveniles are generally a darker green. When captured *Phelsuma* turn brownish black. The red spots fade but reappear, beautifully superimposed over the dark velvety pigment. After release in the sun light the green gradually returns in ragged patches. The underside is either yellow, light green or bluish grey.

Judging from the size of most of the small juveniles, the main hatching season is in the early monsoon (May). However, hatchling size *Phelsuma* are seen in July and Jerry

Vaughan, a resident of the islands observed mating this year on 24th July.

M. A. Smith (1935), gives a good general description of this delightful lizard and writes under Range: "The Andaman Islands, where it is common particularly in the vicinity of Port Blair; of diurnal and arboreal habits, but found also sometimes in houses. Stoliczka (1873) states that it generally hides under the bark of trees but also often feeds on the ground".

Its greater density in the dwelling areas in and around Port Blair and Mayabandar may be due to the preponderancy of optimum habitat trees, i.e. coconut, arecanut, plantain in open sunny groves which seem to be the pre-

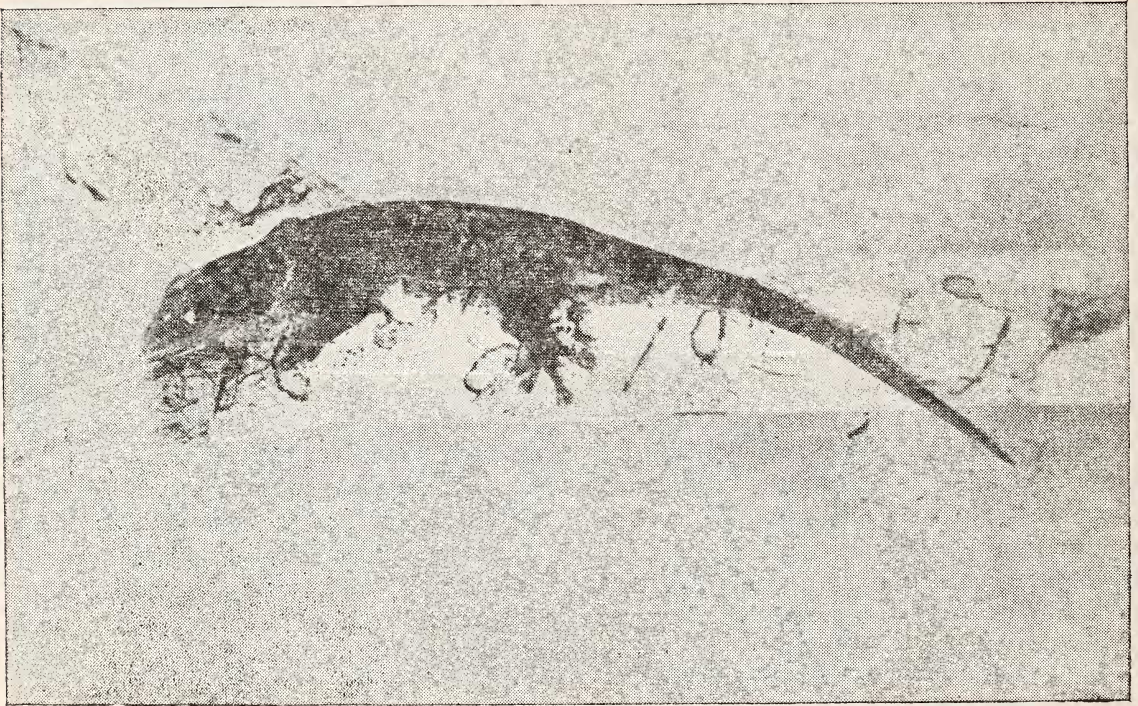


Fig. 1. Adult female Andaman Day Gecko.

ference of this species. A visit to the Port Blair zoo (run by the Forest Department) was doubly interesting; besides seeing caged endemics like the Narcondam Hornbill and Nicobar Megapode we spent a good time watching *Phelsuma* antics in the zoo grounds.

Annandale (1904), wrote that "*P. andamanense* is probably the most interesting of the Andaman lizards. Its allies are found not in the Malayan islands or on the mainland of Asia, nor even on the mainland of Africa, MADRAS SNAKE PARK TRUST, MADRAS 600 022, February 14, 1978. .

but in Mauritius, the Seychelles, Reunion and Madagascar."

No further work has been done on *Phelsuma*; its call remains undescribed and we know next to nothing of its biology. Meanwhile it remains unlisted on the Wildlife Act Schedule (besides several other Andaman endemics) and deserves to be protected as a national monument as being a uniquely Indian species, found no where else in the world.

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REFERENCES

SMITH, M. A. (1935): Fauna of British India, vol. 3.

ANNANDALE, N. (1904): The Lizards of the

Andamans. *Royal Asiatic Society of Bengal* vol. I, part II, supp. p. 12.

20. BREEDING OF TOKAY GECKO

(With a photograph)

In the two most recent definitive works on S. E. Asian herpetology, Smith's FAUNA OF BRITISH INDIA Vol. 2 and Taylor's LIZARDS OF THAILAND there are only a few facts on the breeding biology of *Gecko gecko*. Smith has nothing and Taylor mentions the colour of the young and describes the eggs: "The biscuit-shaped eggs are plastered together and against a surface, usually in some dark place and left to hatch. Each female lays only two hard shelled eggs at a single laying."

Two pairs of this giant gecko were received at the Madras Snake Park from Calcutta during 1976. They are housed in a well ventilated, glass fronted display terrarium. Their average length is 25 cm.

On 6 July the keeper, M. Mani, discovered 2 eggs adhering to a small dry log kept in the terrarium. They were a few cms apart and measured about 6 cm in diameter. One of the eggs was accidentally knocked off. The remaining egg hatched on September 8th, an incubation period of 64 days.

The hatchling is 9 cms in length and brilliantly marked, dorsal reddish brown with white spots, underside greyish brown, with a black and white banded tail. It is a most lively young gecko, chirping and jumping, open mouthed if a finger is poked too close. Already it shows the adult tendency of biting and refusing to let go.